

REMARKS

By the above amendment which accompanies the RCE, the title of the invention has been amended and new claims 7-9 have been presented which recite features as illustrated in the different embodiments of the present invention as illustrated in Figs. 2, 3, 4 and 7, for example. More particularly, independent claim 7 recites the feature of a rotating electric machine comprising a plurality of annular ventilating passages, a rotor iron core, a rotating shaft, a pair of boosters, a plurality of coolers, a plurality of radially extending ventilating ducts, a first ventilating circuit and a second ventilating circuit, while more particularly defining the features thereof, which features are not disclosed or taught in the cited art, as will become clear from the following discussion. Applicants note that claims 7 and 8 recite features not recited in claims 1-6, which have been canceled, and it is apparent that such recited features would raise new issues requiring further search and/or consideration, such that the presentation of such claims in response to the final Office Action dated February 7, 2003, would have resulted in an Advisory Action denying entry of the Amendment. Accordingly, the RCE and this amendment are being submitted on even date herewith.

The rejection of claims 1-3 under 35 U.S.C. 102(e) as being anticipated by Hess et al (US 6,097,116) and the rejection of claims 4-6 under 35 U.S.C. 103(a) as being unpatentable over Hess et al, such rejections are considered to be obviated by the cancellation of claims 1-6 and the presentation of new claims 7-9, with the rejections being traversed insofar as they are applicable to new claims 7-9. As such, reconsideration and withdrawal of the rejection in relation to claims 7-9 are respectfully requested.

As is apparent from the features recited in claims 7-9, in accordance with the present invention, a plurality of coolers for cooling the boosted coolant are provided with each of the plurality of coolers being provided for a respective one of the

plurality of annular ventilating passages, with a plurality of radially extending ventilating ducts being formed in the stator iron core and spaced from one another in the axial direction thereof, and each of the plurality of radially extending ventilating ducts permitting the boosted coolant to flow in a radial direction through the stator iron core, whereby a first ventilating circuit is provided which allows the coolant boosted by one of the pair of boosters to flow through a part of the air gap, an end portion in an axial direction of the stator iron core in a direction from the inner periphery to the outer periphery thereof through the radially extending ventilating ducts therein, and the annular ventilating passage provided for the end portion thereof and the cooler associated with the annular ventilating passage for the end portion of the stator iron core to a suction side of the one of the pair of boosters, and a second ventilating circuit which allows the coolant boosted by the one of the pair of boosters to flow through the cooler for the annular ventilating passage for a center portion in the axial direction of the stator iron core, the center portion of the stator iron core in a direction from the outer periphery to the inner periphery thereof through the radially extending ventilating ducts therein, a part of air gap, an adjacent portion of the stator iron core in a direction from the inner periphery to the outer periphery thereof through the radially extending ventilating ducts therein, the annular ventilating passage provided for the adjacent portion of the stator iron core and the cooler associated with the annular ventilating passage for the adjacent portion of the stator iron core to the suction side of the one of the pair of boosters. Such features are recited in claim 7 and are described at pages 12 and 13 of the specification of this application, with the first ventilating circuit being represented by the circuit 29 as illustrated in Fig. 4, for example, and the second ventilating circuit corresponding to the ventilating circuit 30 in which the coolant passes through the center portion of the stator iron core in a direction from the outer periphery to the inner periphery thereof, whereas in the first ventilating circuit, the coolant flows through the radially extending

ventilating ducts of the stator iron core in a direction from the inner periphery to the outer periphery thereof. As such, it is apparent that the ventilating circuits as described provide for oppositely directed flow through the radially extending ducts of the stator iron core and applicants submit that such features as well as other features as recited in claim 7 and the dependent claims are not disclosed or taught by Hess et al in the sense of 35 U.S.C. 102 or 35 U.S.C. 103.

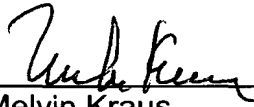
Applicants note that the Examiner refers to the booster 33 of Hess et al, and in addition to Hess et al failing to disclose the first and second ventilating circuits as now recited in claim 7 and the dependent claims, applicants submit that Hess et al provides a coolant flow direction through the fan or booster 33 which is opposite to that recited in claim 7, in that since the fan or booster 33 in Hess et al is located at the most downstream side of the coolant flow, the coolant density flowing through the fan or booster 33 is low, such that sufficient performance of the fan or booster cannot be obtained. Additionally, the coolant introduced from the outer periphery of the stator iron core in Hess et al is not blown into the air gap to cool the same and the air gap is mostly cooled by air blown out from the rotor iron core, which results in the problems as described with the prior art arrangements as described in the specification of this application. Accordingly, applicants submit that claim 7 and dependent claims 8 and 9 recite features not disclosed or taught by Hess et al in the sense of 35 U.S.C. 102 or 35 U.S.C. 103, and claim 7 and the dependent claims should be considered to patentably distinguish thereover.

In view of the above amendments and remarks and the filing of the RCE, applicants submit that all claims present in this application should now be in condition for allowance, and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing

of this paper, including extension of time fees, to Deposit Account No. 01-2135
(503.38383CX1) and please credit any excess fees to such deposit account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Melvin Kraus", is written over a horizontal line.

Melvin Kraus

Registration No. 22,466

ANTONELLI, TERRY, STOUT & KRAUS, LLP

MK/cee
(703) 312-6600

TITLE OF THE INVENTION:

Please amend the title of the invention as follows:

ROTATING ELECTRIC MACHINE AND ~~COOLING METHOD THEREOF~~